

## GENWAL COAL COMPANY

January 12, 1995

Received 1/13/95  
@ PFO

Mr. Darron Haddock  
Permit Supervisor  
Division of Oil, Gas, and Mining  
355 West North Temple  
3 Triad Center, Suite 350  
Salt Lake City, Utah 84180-1203

RE: Revised calculations for Crandall Canyon Upper and Lower  
Flumes Associated with LBA #9, Genwal Coal Company, Crandall  
Canyon Mine, ACT/015/032.

Dear Darron:

95B 2 Copy ~~sent to file~~  
Annotated file

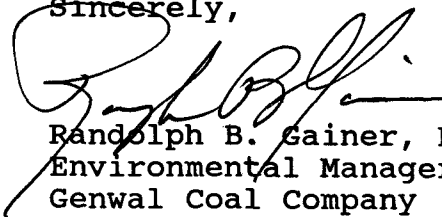
We have completed the recalculation of the stream flows associated with the measurements collected in the Parshall Flumes designated as Upper and Lower Crandall Canyon Flumes. In areas where data are missing the recorder was either broken or the stream frozen. A few irreconcilable readings between the flumes still exist for the early years (1988-1991) of flume operation. Typically, the lower flume shows a lower discharge rate than the upper flume. These differences may be attributed to one or more of the following reasons. They are:

- 1 - Water was being withdrawn from Crandall Creek for in-mine use.
- 2 - The individual changing the charts and recording the field data incorrectly read the staff gages of the Parshall Flumes.
- 3 - During portions of the year the section of Crandall Canyon between the Upper and Lower Flumes is a loosing section of stream.
- 4 - Several beaver dams, present between the two flumes, alter the stream flow and the discharge of the stream. Impounding of the water tends to spread into the contiguous alluvial sediments and potentially bypasses the lower flume as a form of lateral groundwater flow.

I appreciate your assistance in allowing us the needed time to revise the data. Should you have additional questions, please contact me at (801) 687-9813.

Mr. Darron Haddock  
January 12, 1995  
Page 2

Sincerely,

A handwritten signature in black ink, appearing to read "R. B. Gainer", is written over the typed name and title.

Randolph B. Gainer, P.G.  
Environmental Manager  
Genwal Coal Company